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PROCUREMENT SECTION
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WATER SUPPLY OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above
in cooperation with other Federal, State and private organizations.

AS OF
FEB. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

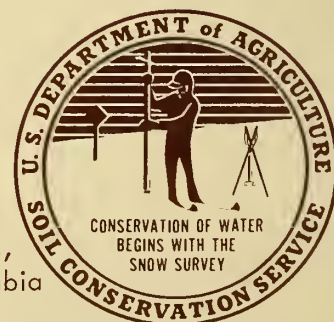
The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



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WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

FEBRUARY 8, 1973

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

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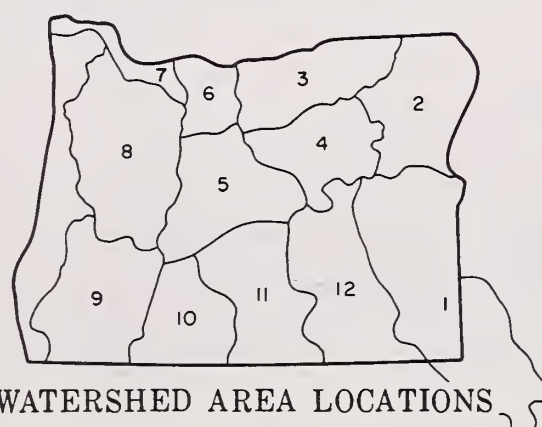
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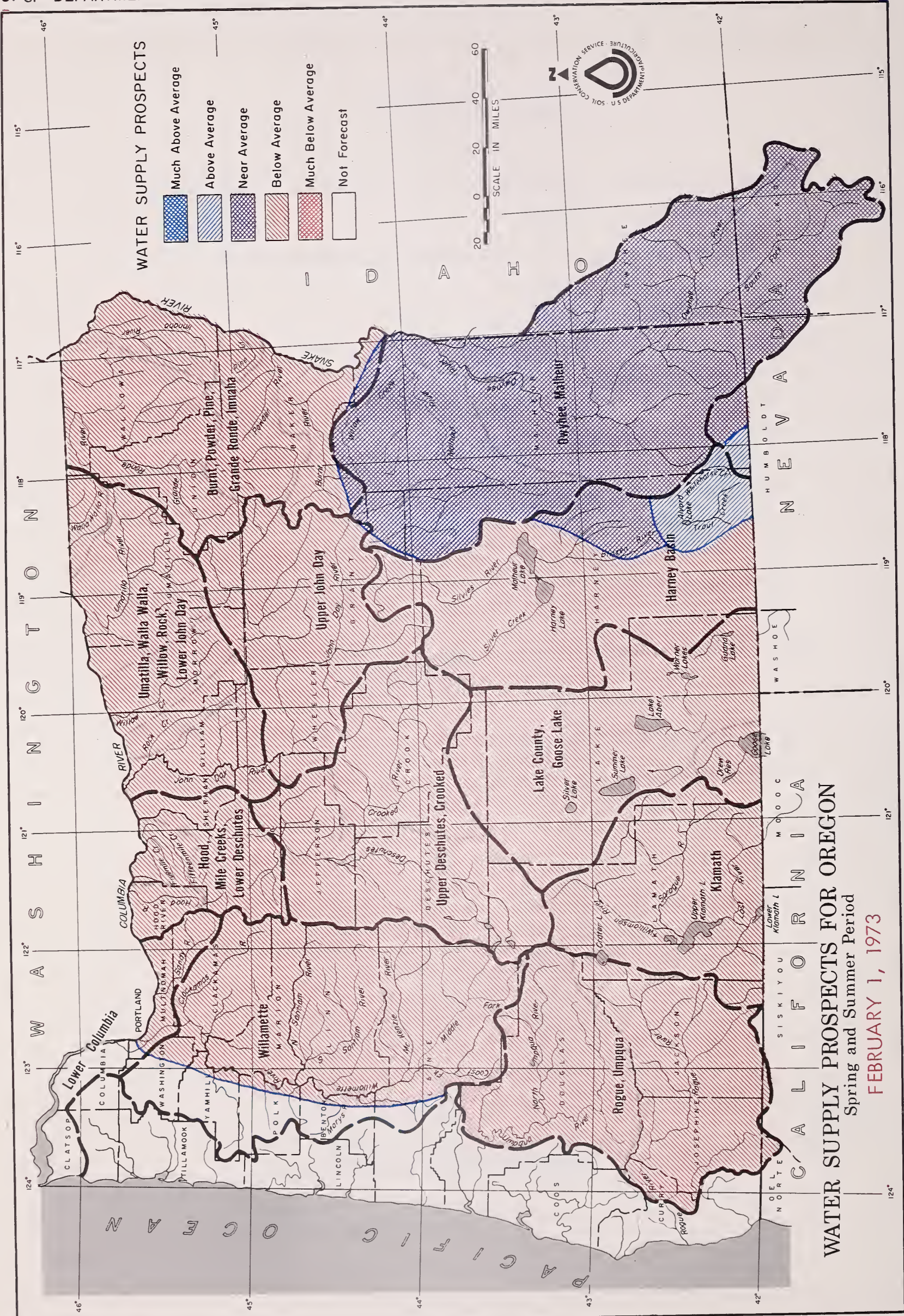
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WATER SUPPLY PROSPECTS FOR OREGON

Spring and Summer Period

FEBRUARY 1, 1973

WATER SUPPLY OUTLOOK for OREGON

FEBRUARY 1, 1973

The water supply outlook for Oregon for this spring and summer ranges from much below average up to near average. Users with stored water available will have adequate supplies. Many users, dependent upon direct diversion from streams, will experience some shortages.

SNOW COVER

The mountain snowpack is near average only in Southeastern Oregon. It varies down to 40 to 50 percent of average on the Upper Grande Ronde, Umatilla, Hood, and most Willamette Valley Watersheds. The rest of the state has a snow cover generally 50 to 80 percent of normal.

PRECIPITATION

So far this winter the main storm track has been to the south of Oregon. As a result, precipitation during the November-January period has been near average only in extreme Eastern Oregon and 70 to 80 percent of average over the rest of the state.

SOIL MOISTURE

Soil moisture in the mountains is generally near average. This factor will not detract much from the snow melt runoff.

RESERVOIR STORAGE

Reservoir storage is excellent again this year. Good streamflow from the heavy snowpack of the past two years has allowed some carryover. Twenty-five major irrigation reservoirs are storing 2,188,400 acre feet of water. This is 128% of average.

STREAMFLOW

Streamflow for the October-January period has been excellent on the Owyhee River and near normal on those rivers and streams with spring and ground water contributions. Most streams, fed mainly by surface and overland flow, produced below average amounts during this period.

continued on next page

Prospective April-September streamflow for some representative streams are as follows:

<u>STREAM</u>	<u>FORECAST</u> <u>As Percent of 1953-67 Average</u>
Owyhee net Inflow	107
Malheur near Drewsey	98
Deschutes near Benham Falls	90
Grande Ronde near La Grande	64
Willamette, Mid. Fk. nr. Oakridge	65
Klamath Lake net Inflow	72
Rogue near Raygold	85
Silvies near Burns	88
John Day, Mid. Fk. near Ritter	70

This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.



WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS

OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

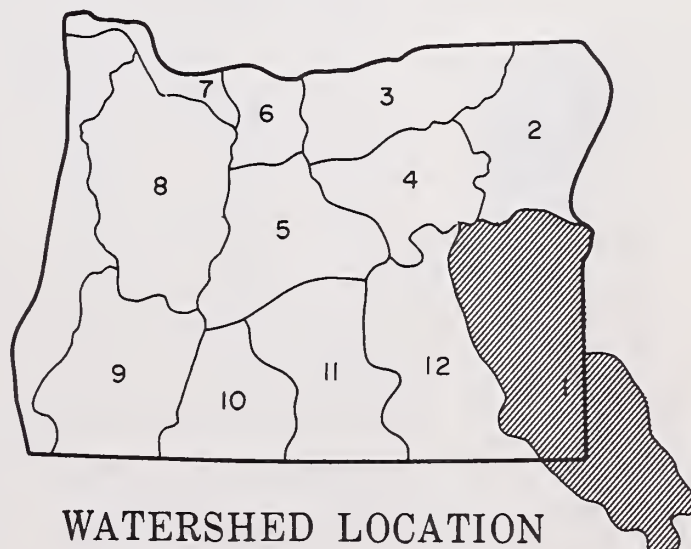
GENERAL OUTLOOK

NEAR AVERAGE SPRING AND SUMMER WATER SUPPLIES ARE IN PROSPECT FOR MALHEUR COUNTY WATER USERS DEPENDING ON DIRECT DIVERSION. THOSE WATER USERS WITH ACCESS TO STORED WATER WILL HAVE EXCELLENT SUPPLIES. THE MOUNTAIN SNOWPACK VARIES FROM 85 PERCENT ON JORDAN CREEK TO 115 PERCENT ON THE OWYHEE. WINTER PRECIPITATION FOR THE NOVEMBER THRU JANUARY PERIOD IS 14 PERCENT ABOVE NORMAL. SOIL MOISTURE IS NEAR AVERAGE WHICH WILL ENHANCE SPRING RUNOFF. RESERVOIR STORAGE IS 50 PERCENT ABOVE AVERAGE IN THE AREA. THE OWYHEE INFLOW WAS 140 PERCENT OF AVERAGE DURING JANUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Average	Fair
Bully Creek	Average	Average
Cow Creek	Average	Fair
Jordan Creek	Average	Fair
Jordan Valley Irrig. Dist.	Average	Average
McDermitt Creek	Average	Fair
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Excellent	Average
Tenmile Creek	Average	Fair
Vale-Oregon Irrig. Dist.	Excellent	Average
Warm Springs Irrig. Dist.	Excellent	Average
Willow Creek (Reservoired)	Excellent	Average



WATERSHED LOCATION

Report prepared by
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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Bully Creek at Warm Springs	11.5	100	March-May		11.4
Jordan Creek above Lone Tree Creek	72	86	April-July		85 ^m
	72	85	April-Sept.		85 ^m
Malheur near Drewsey	103	93	Feb.-July		111
	70	98	April-Sept.		72
Malheur, North Fork at Beulah ^d	62	81	Feb.-July		76
	48	87	April-Sept.		60
Owyhee Reservoir net Inflow ^k	459	105	Feb.-July	805	438
	322	107	April-Sept.	504	300

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000	June 15	May 24
	250	June 30	June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Antelope	70.0	^b	9.8	5.7
Beulah Res.	60.0	30.4	31.9	23.3
Bully Creek	30.0	11.8	10.2	14.5
Owyhee	715.0	566.5	595.7	359.3
Warm Springs	191.0	102.6	121.9	74.6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Jordan Creek	1	101	80
Malheur River	2	98	81
Owyhee River	1	68	95

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Jordan Creek	4	35	85
Malheur River	5	55	95
Owyhee River	4	55	115

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

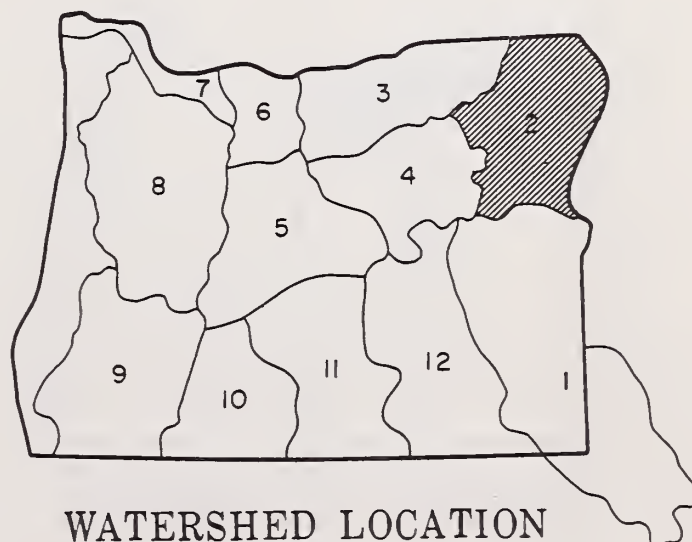
GENERAL OUTLOOK

WATER USERS IN NORTHEASTERN OREGON WILL HAVE BELOW AVERAGE TO AVERAGE WATER SUPPLIES DURING THE 1973 SEASON. WATER USERS DEPENDING ON DIRECT DIVERSION IN UNION COUNTY WILL EXPERIENCE SOME LATE SEASON SHORTAGES IF CURRENT CONDITIONS CONTINUE. MOUNTAIN SNOW COVER VARIES FROM 40 PERCENT ON THE UPPER GRANDE RONDE TO 90 PERCENT ON THE POWDER RIVER. PRECIPITATION DURING JANUARY WAS 68 PERCENT OF NORMAL AND 91 PERCENT FOR THE NOVEMBER THRU JANUARY PERIOD. SOILS ARE HOLDING NEAR NORMAL AMOUNTS OF MOISTURE. RESERVOIR STORAGE IS NEAR NORMAL. THE JANUARY FLOW OF THE GRANDE RONDE AT LA GRANDE WAS 49 PERCENT OF AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Average	Fair
Baker Valley	Average	Average
Big Creek	Average	Fair
Clover Cr. (nr. N. Powder)	Average	Fair
Cove	Average	Fair
Durkee	Average	Fair
Eagle Valley	Average	Fair
Elgin	Fair	Fair
Enterprise-Joseph	Average	Average
Hereford-Bridgeport	Average	Average
Imnaha River	Average	Fair
LaGrande-Island City	Fair	Fair
Lostine-Wallowa	Average	Fair
No. Powder River-Wolf Creek	Average	Fair
Pine Valley	Average	Fair
Powder River-Elk Creek	Average	Fair
Summerville	Fair	Fair
Sumpter Valley	Average	Fair
Union-Hot Lake	Fair	Fair
Unity	Average	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Bear near Wallowa	55	84	April-Sept.		66
Burnt near Hereford ^d	39	82	Feb. -July		48
	30	82	April-Sept.		35
Catherine near Union	53	83	April-Sept.		64
Eagle Creek above Skull Creek	151	90	April-July		168 ^m
	164	90	April-Sept.		182 ^m
Grande Ronde at La Grande	134	64	March-Sept.		211
	112	64	April-Sept.		175
Hurricane near Joseph	41	89	April-Sept.		47
Imnaha at Imnaha	251	82	April-Sept.		306
Lostine near Lostine	106	85	April-Sept.		125
Powder near Sumpter	39	73	April-July		54
	40	72	April-Sept.		56
Wallowa, East Fork near Joseph ^d	12.0	90	Feb. -Sept.		13.4
	11.8	90	April-Sept.		12.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <i>i</i>
Phillips Lake	73.5	51.9	50.8	- -
Thief Valley	17.4	17.4	17.4	- -
Unity	25.2	10.7	11.2	8.8
Wallowa Lake	37.5	14.1	20.6	21.6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <i>i</i>
Burnt River	4	45	80
Grande Ronde River above La Grande	4	20	40
Powder River	5	50	90
Wallowa, Imnaha, Catherine Creek	6	55	80

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <i>i</i>
Burnt, Powder	2	94	85
Grande Ronde, Catherine Creek, Imnaha River	2	92	100

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

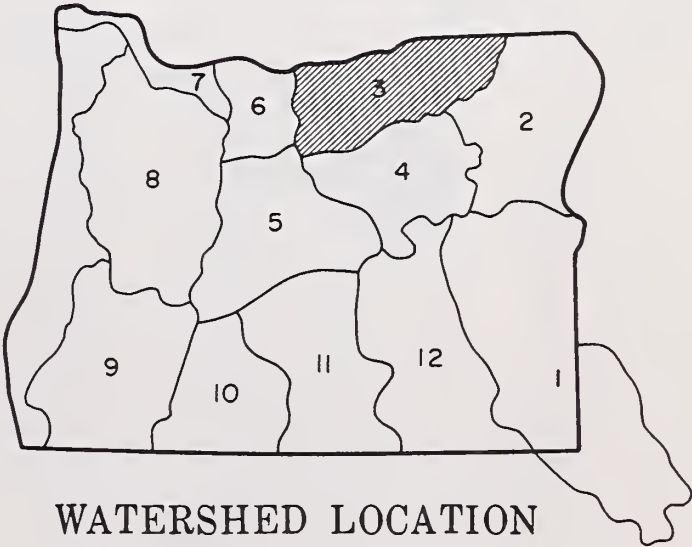
GENERAL OUTLOOK

UMATILLA COUNTY WATER USERS WILL HAVE BELOW AVERAGE WATER SUPPLIES DURING THE SPRING AND SUMMER OF 1973. STREAMFLOW FORECASTS ARE 50 TO 65 PERCENT OF AVERAGE. THE SNOWPACK IS 40 TO 45 PERCENT OF AVERAGE. RAINFALL DURING JANUARY WAS 45 PERCENT OF AVERAGE AND 74 PERCENT OF AVERAGE FOR THE NOVEMBER THRU JANUARY PERIOD. SOILS ARE WELL WETTED AND WILL ENHANCE RUNOFF FROM THE SPRING PRECIPITATION. RESERVOIR STORAGE IS 72 PERCENT OF AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Fair	Fair
Walla Walla River, So. Fork	Fair	Fair
Walla Walla River, Main	Fair	Fair
Walla Walla River, Little	Fair	Fair
Couse Creek	Fair	Fair
Dry Creek	Fair	Fair
Pine Creek	Fair	Fair
Umatilla River, Main	Fair	Fair
Wildhorse Creek	Average	Fair
Umatilla R. (Cold Springs Reservoir)	Average	Fair
Umatilla R. (McKay Res.)	Average	Fair
McKay Creek	Fair	Fair
Birch Creek	Fair	Fair
Butter Creek	Fair	Fair
Willow Creek	Fair	Fair
Rhea Creek	Fair	Fair
Rock Creek (John Day Tributary)	Fair	Fair



STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Birch Creek at Rieth	19	65	Feb.-July		29
	12.0	65	April-Sept.		18.4
Butter Creek near Pine City	8.1	65	March-July		12.4
McKay near Pilot Rock	18	65	April-Sept.		28
Umatilla near Gibbon	49	50	March-Sept.		99
	40	50	April-Sept.		80
Umatilla at Pendleton	135	65	March-Sept.		208
Walla Walla, South Fork near Milton	70	89	March-Sept.		79
	57	85	April-Sept.		67

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	May 12	May 23

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Cold Springs	50.0	21.4	28.8	29.9
McKay	73.8	19.3	59.6	26.3

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Umatilla, Walla Walla, McKay Creek	3	120	110

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
McKay Creek	3	15	40
Umatilla River	3	15	40
Walla Walla River	2	20	45

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

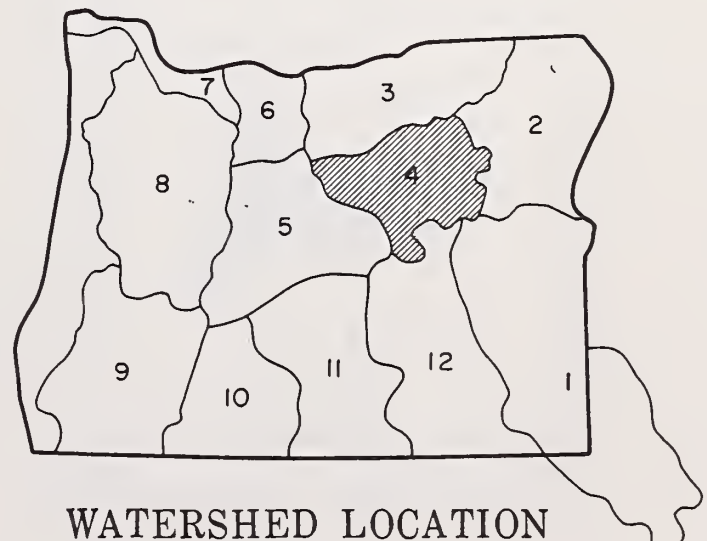
GENERAL OUTLOOK

JOHN DAY RIVER WATER USERS WILL HAVE NEAR AVERAGE EARLY SEASON AND BELOW AVERAGE LATE SEASON WATER SUPPLIES. AREA STREAMS ARE FORECAST TO FLOW 70 TO 80 PERCENT OF AVERAGE. THE MOUNTAIN SNOWPACK IS 70 TO 80 PERCENT OF AVERAGE. PRECIPITATION IN THE AREA HAS BEEN 72 PERCENT OF AVERAGE DURING JANUARY AND 82 PERCENT DURING THE NOVEMBER THRU JANUARY PERIOD. SOILS ARE HOLDING NEAR NORMAL SUPPLIES OF MOISTURE FOR THIS TIME OF YEAR. THE JOHN DAY AT SERVICE CREEK FLOWED 73 PERCENT OF AVERAGE DURING JANUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Average	Fair
Beech Creek-Fox-Long Crs.	Average	Fair
Bridge-Mountain Creeks	Average	Fair
Camas Creek	Average	Fair
Cherry Creek	Average	Fair
Indian-Pine Creeks	Average	Fair
John Day River, Main Fork	Average	Fair
John Day River, Mid. Fork	Average	Fair
John Day River, N. Fork	Average	Fair
John Day River, S. Fork	Average	Fair
Monument-Kimberly	Average	Fair
Strawberry Creek	Average	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Camas Creek near Ukiah	31	71	March-July		43
	25	70	April-Sept.		35
John Day at Prairie City	38	75	March-July		51
	33	72	April-Sept.		46
John Day, Middle Fork at Ritter	96	71	March-July		135
	81	70	April-Sept.		116
John Day, North Fork at Monument	523	78	March-July		682
	459	78	April-Sept.		589
Strawberry near Prairie City	6.9	88	March-July		7.9
	7.0	88	April-Sept.		8.4

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
John Day abv. Dayville	6	98	93
John Day, North Fork	2	98	96

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
John Day, North Fork	7	35	70
John Day abv. Dayville	5	45	80

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

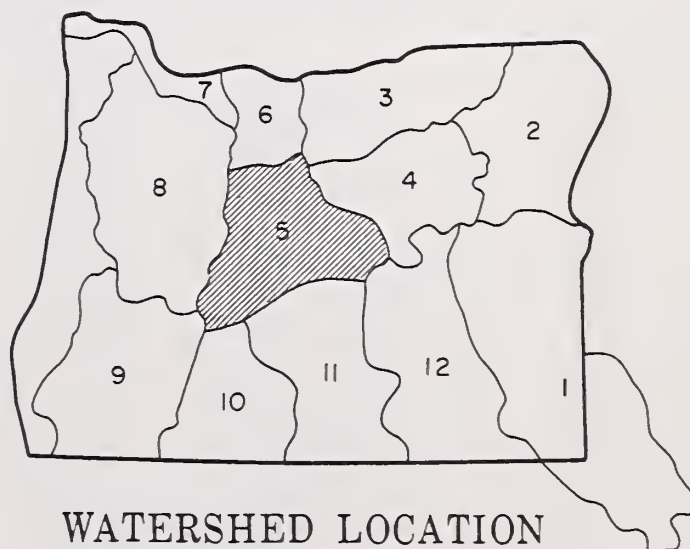
GENERAL OUTLOOK

WATER USERS IN CENTRAL OREGON DEPENDING ON DIRECT DIVERSIONS WILL HAVE AVERAGE TO SLIGHTLY BELOW AVERAGE WATER SUPPLIES WHILE THOSE WITH ACCESS TO STORED WATER WILL HAVE EXCELLENT SUPPLIES. SNOW COVER RANGES FROM 60 PERCENT ON THE LITTLE DESCHUTES TO 70 PERCENT ON THE CROOKED, OCHOCO, AND DESCHUTES ABOVE WICKIUP. JANUARY RAINFALL WAS 84 PERCENT OF AVERAGE. SOIL MOISTURE STORAGE IS NEAR NORMAL. RESERVOIR STORAGE IS ABOVE AVERAGE. THE DESCHUTES AT MOODY FLOWED 99 PERCENT OF AVERAGE DURING JANUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation District	Excellent	Average
Bear Creek	Average	Fair
Beaver Creek	Average	Fair
Camp Creek	Average	Fair
Central Ore. Irrig. Dist.	Excellent	Average
Crooked River	Fair	Fair
Deschutes River	Average	Average
Hay-Trout Creeks	Fair	Poor
Lone Pine Irrig. Dist.	Average	Average
Mill Creek	Average	Fair
North Unit Irrig. Dist.	Average	Average
Ochoco Creek	Fair	Fair
Sisters Irrigation Dist.	Average	Fair
Snow Creek Irrig. Dist.	Average	Fair
Squaw Creek Irrig. Dist.	Average	Fair
Swalley Ditch	Excellent	Average
Tumalo Project	Average	Fair
Walker Basin Irrig. Dist.	Average	Average



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Beaver Creek near Paulina	33	72	Feb.-July		46
	15	72	April-Sept.		20
Crane Prairie Reservoir total Inflow	90	72	April-Sept.		126
Crescent at Crescent Lake ^d	18	71	March-July		26
	21	72	April-Sept.		28
Crooked near Post	124	72	Feb.-July		173
	75	74	April-Sept.		101
Deschutes at Benham Falls ^d	353	90	April-July		393
	536	90	April-Sept.		596
Deschutes below Snow Creek	60	76	Feb.-Sept.		79
	53	80	April-Sept.		66
Deschutes, Little near La Pined ^d	80	71	Feb.-July		113
	59	62	April-Sept.		95
Ochoco Reservoir net Inflow	22	59	Feb.-July		38
	14	64	April-Sept.		23
Odell near Crescent	22	72	April-Sept.		30
Squaw near Sisters	44	86	April-Sept.		51
Tumalo near Bend ^d	43	87	April-Sept.		49

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	*		
Crooked R. near Post	100	May 23	June 1
Deschutes at Bend	*		
Little Deschutes near La Pine	400	May 30	June 7
	200	June 20	July 8
*To be issued April 1			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Crane Prairie	55.3	53.1	55.3	44.4
Crescent Lake	86.9	81.7	71.4	47.3
Ochoco	47.5	26.2	29.1	22.2
Prineville	153.0	108.8	92.1	100.7
Wickiup	200.0	185.4	190.7	160.8

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Crooked R., Upper Deschutes River	2	90	90

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Crooked, Ochoco	4	35	70
Deschutes abv. Wickiup	3	40	70
Little Deschutes	4	40	60
Tumalo & Squaw Crs.	3	35	65

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

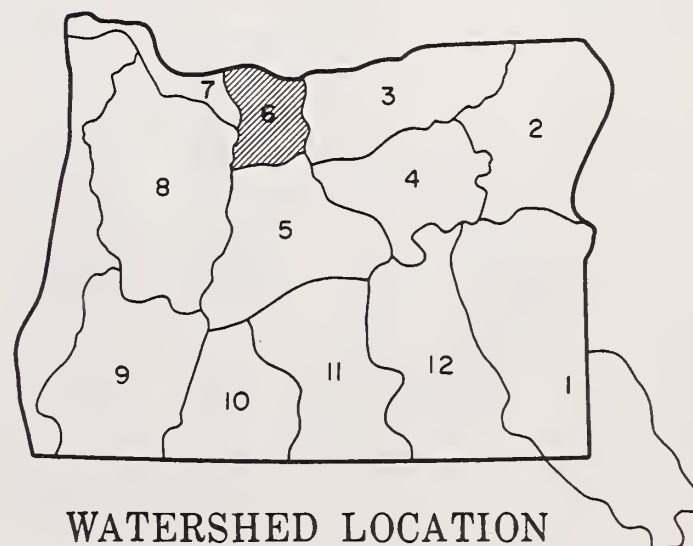
GENERAL OUTLOOK

HOOD RIVER AND WASCO COUNTY WATER USERS WILL HAVE AVERAGE TO BELOW AVERAGE WATER SUPPLIES THIS SPRING AND SUMMER. STREAMFLOW FORECASTS ARE ABOUT 70 PERCENT OF AVERAGE. THE MOUNTAIN SNOWPACK IS 50 PERCENT OF AVERAGE. JANUARY PRECIPITATION WAS 61 PERCENT OF AVERAGE AND RAINFALL FOR THE NOVEMBER THRU JANUARY PERIOD WAS 77 PERCENT OF AVERAGE. CLEAR LAKE (WASCO RESERVOIR) WAS HOLDING 7.2 THOUSAND ACRE FEET JANUARY 26.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Average	Fair
Badger Creek	Average	Fair
Dee Irrigation Dist.	Average	Average
East Fork Irrig. Dist.	Average	Average
Farmers Irrigation Dist.	Average	Average
Hood River Irrig. Dist.	Average	Average
Juniper Flat	Average	Fair
Middle Fork Irrig. Dist.	Average	Average
Mile Creeks	Average	Fair
Mill Creek	Average	Fair
Mount Hood Irrig. Dist.	Average	Average
Rock-Gate-Threemile Crs.	Average	Fair
Tygh Creek	Average	Average
White River	Average	Average



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Hood River near Tucker Bridge	197	70	April-July		282
	232	69	April-Sept.		336
Hood, West Fork near Dee	98	70	April-July		140
	111	69	April-Sept.		161
White below Tygh Valley	90	70	April-July		128
	99	69	April-Sept.		144

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*33	July 15-31	**39
*Average cfs forecast to flow for this 2-week period. **Average cfs for period of record.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake (Wasco)	11.9	7.5	7.2*	2.6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Hood River	6	20	45
Mile Creeks	-	-	-
White River	3	20	50

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Hood River, Mile Creeks	1	100	

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

as of

FEBRUARY 1, 1973

GENERAL OUTLOOK

THE COLUMBIA BASIN SNOWPACK RANGES FROM A LOW OF 25 PERCENT OF NORMAL ON THE PALOUSE RIVER IN EASTERN WASHINGTON-WESTERN IDAHO TO A HIGH OF 140 PERCENT ON THE BRUNEAU RIVER IN SOUTHERN IDAHO. ON THE MAIN WATER PRODUCING AREAS OF BRITISH COLUMBIA AND WESTERN MONTANA, SNOW RANGES FROM NEAR 70 TO 90 PERCENT OF USUAL AMOUNTS. RESERVOIR STORAGE, EXCEPT ALONG THE WILLAMETTE RIVER, IS WELL ABOVE AVERAGE. SINCE FLOW OF THE COLUMBIA AT THE DALLES IS EXPECTED TO BE NEAR 20 PERCENT LESS THAN NORMAL, THERE IS NO PROSPECT OF ANY UNUSUAL HIGH WATER PROBLEMS DURING THE MAIN SPRING SNOWMELT PERIOD.

COLUMBIA RIVER BASIN



Report prepared by
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S. W. WASHINGTON ST.
PORTLAND, OREGON 97205

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average
Sandy River	2	20	50

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ²
Columbia at The Dalles ^d	56,000	77	April-June		72,406
	86,000	82	April-Sept.		105,176
Sandy River near Marmot	251	70	April-July		359
	289	70	April-Sept.		413

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW ^d (1,000 A.F.)			PEAK ^e (1,000 c.f.s.)	DATE
	APR. — SEPT.	APR. — JUNE	MAY — JUNE		
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.



WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

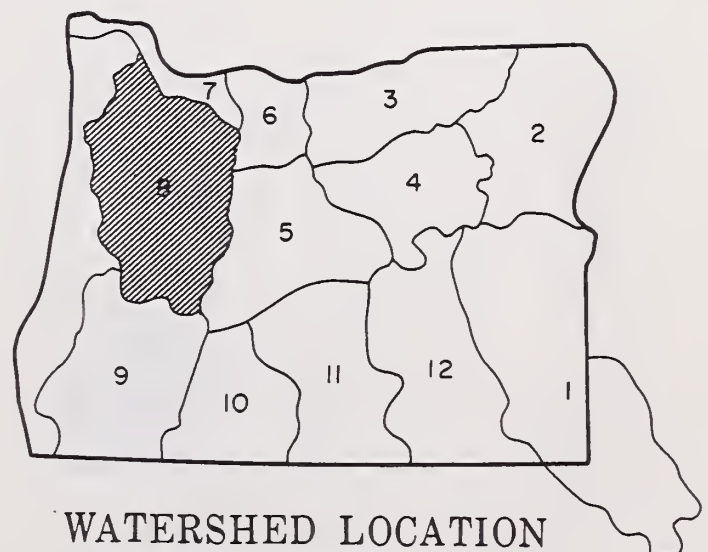
GENERAL OUTLOOK

WATER SUPPLIES IN THE WILLAMETTE BASIN WILL BE BELOW AVERAGE DURING THE 1973 SEASON. THE MOUNTAIN SNOWPACK VARIES FROM 30 PERCENT ON THE CLACKAMAS TO 55 PERCENT ON THE MIDDLE FORK OF THE WILLAMETTE. THE NOVEMBER THRU JANUARY RAINFALL WAS 84 PERCENT OF NORMAL AND 70 PERCENT FOR JANUARY. THE FLOW OF THE MIDDLE FORK OF THE WILLAMETTE WAS 78 PERCENT OF NORMAL DURING JANUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Fair	Fair
Clackamas	Fair	Fair
McKenzie	Fair	Fair
Molalla	Fair	Fair
Santiam, North	Fair	Fair
Santiam, South	Fair	Fair
Willamette, Coast Fork	Fair	Fair
Willamette, Middle Fork	Fair	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clackamas at Estacada	447	65	April-July		689
	570	71	April-Sept.		800
Clackamas above Three Lynx	361	70	April-July		517
	433	71	April-Sept.		610
McKenzie at McKenzie Bridge	372	80	April-July		465
	500	81	April-Sept.		614
McKenzie near Vida	815	75	April-July		1087
	1004	76	April-Sept.		1321
McKenzie, So. Fork near Rainbow	180	81	April-July		221
	206	82	April-Sept.		252
Oak Grove Fork above Power Intake	191	81	April-July		125
	134	82	April-Sept.		163
Row near Dorena	66	63	April-July		106
	70	64	April-Sept.		110
Santiam, North at Mehama ^d	504	63	April-July		800
	576	64	April-Sept.		901
Santiam, South at Waterloo	375	63	April-July		596
	405	64	April-Sept.		633
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge	471	65	April-July	890	725
	554	67	April-Sept.	1011	828
Willamette, No. Fk. of Mid. Fork near Oakridge	128	65	April-July		198
	146	67	April-Sept.		219
Willamette at Salem ^d	2999	64	April-July		4696
	3496	67	April-Sept.		5199

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Clackamas River	2	10	30
McKenzie River	3	25	55
Row River	2	20	45
Santiam River	4	20	40
Willamette, Mid. Fk.	5	30	55

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Blue River	85.6*	8.1	12.3	- -
Cottage Grove	30.0*	3.0	2.7	2.5
Cougar	155.2*	4.1	48.1	- -
Detroit	299.9*	24.0	70.0	41.9
Dorena	70.5*	6.8	23.8	9.6
Fall Creek	115.0*	7.4	18.9	- -
Fern Creek	94.2*	13.2	42.4	20.8
Foster	30.0*	1.7	4.6	- -
Green Peter	270.0*	27.6	82.7	- -
Hills Creek	200.0*	18.1	83.0	22.4
Lookout Point	337.2*	14.1	104.5	47.1 ^m
Timothy Lake	61.7	51.3	55.3	45.5 ^m
*Multiple purpose reservoir--space reserved primarily for flood runoff.				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

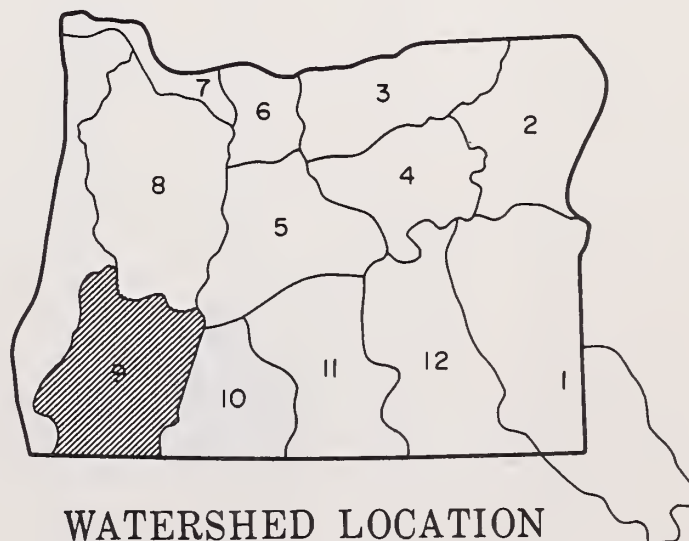
GENERAL OUTLOOK

WATER SUPPLIES WILL GENERALLY BE NEAR AVERAGE TO BELOW AVERAGE THIS NEXT SUMMER. THE MOUNTAIN SNOWCOVER IS BELOW AVERAGE IN THE CASCADES AND MUCH BELOW AVERAGE IN THE SISKIYOU. RESERVOIR STORAGE IS ABOVE NORMAL FOR THIS TIME OF YEAR. SUMMER STREAMFLOW WILL BE 70 TO 90 PERCENT OF AVERAGE. AT THIS TIME IT LOOKS AS THOUGH ONLY THOSE WATER USERS DEPENDENT ON DIRECT DIVERSION WILL EXPERIENCE SOME SHORTAGES.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Fair	Fair
Applegate River, Big	Fair	Fair
Applegate River, Little	Fair	Fair
Ashland Creek	Fair	Fair
Butte Creek, Big	Fair	Fair
Butte Creek, Little	Fair	Fair
Cow Creek	Fair	Fair
Deer Creek	Fair	Fair
Elk Creek	Fair	Fair
Emigrant Creek (abv. Res.)	Fair	Fair
Evans Creek	Fair	Fair
Gold Hill Irrigation Dist.	Average	Fair
Grants Pass Irrig. Dist.	Average	Fair
Grave Creek	Fair	Fair
Illinois River, East Fork	Fair	Fair
Illinois River, West Fork	Fair	Fair
Jump-off-Joe Creek	Fair	Fair
Neil Creek	Fair	Fair
Red Blanket Creek	Fair	Fair
Rogue River	Fair	Fair
Sucker Creek	Fair	Fair
Table Rock Irrig. Dist.	Average	Average
Thompson Creek	Average	Average
Wagner Creek	Fair	Fair
Williams Creek	Fair	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Applegate near Copper	94	67	April-Sept.		140
Clearwater above Trap Creek ^d	73	100	April-Sept.		73
Fourmile Lake net Inflow ^d	4.1	100	April-Sept.		4.1
Hyatt Reservoir net Inflow ^d	2.9 ^a	58 ^b	April-July		5.2
Illinois River near Kerby	153	75	April-July		205
	158	75	April-Sept.		211
Little Butte, N. Fk. at Fish Lake nr. Lake Cr. ^d	10.4	72	April-Sept.		14.4
Little Butte, S. Fk. near Lake Creek	29 ^c	83	April-July		33
Rogue above Prospect	223	82	April-July		269
Rogue, South Fork near Prospect ^d	55	89	April-July		62
	64	86	April-Sept.		74
Rogue at Raygold near Central Point	663	85	April-July	931	781
	800	85	April-Sept.	1132	941
Rogue at Grants Pass	799	85	April-Sept.		940
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls ^d	150	85	April-Sept.		176

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	May 21	May 27
Rogue at Raygold	1200	July 23	Aug. 7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Emigrant Lake	39.0	22.1	23.9	22.4*
Fish Lake	8.0	8.0	8.1	5.5
Fourmile Lake	16.1	11.1	11.7	9.6
Howard Prairie	60.0	43.8	53.8	32.4
Hyatt Prairie	16.1	9.1	15.4	9.8
*Average for years of record after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Applegate	3	40	60
Bear Creek	2	50	50
Butte Creek	4	45	85
Illinois River	3	55	70
North Umpqua	3	30	50
Rogue River	6	45	75

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-6, adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

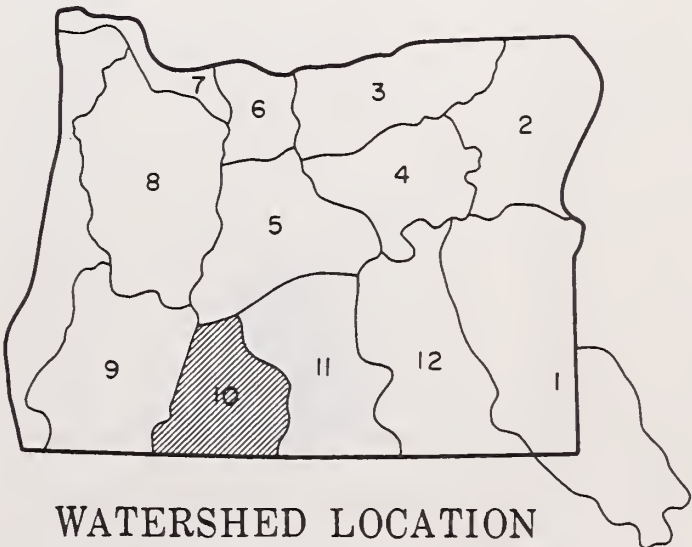
GENERAL OUTLOOK

KLAMATH COUNTY WATER USERS WITH STORED WATER AVAILABLE SHOULD HAVE ADEQUATE SUPPLIES THIS COMING SUMMER. THOSE USERS DEPENDENT ON DIRECT DIVERSIONS WILL EXPERIENCE SOME SHORTAGES. MOUNTAIN SNOW COVER IS BELOW AVERAGE. WINTER PRECIPITATION THIS YEAR HAS BEEN ABOUT 75 PERCENT OF NORMAL. STREAMFLOW TO DATE HAS BEEN NEAR AVERAGE BUT FLOWS THIS SPRING AND SUMMER ARE FORECAST TO BE ABOUT 75 PERCENT OF NORMAL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Fair	Fair
Lost River (Clear Lake)	Average	Average
Lost River (Gerber)	Average	Average
Lost River (Willow Res.)	Average	Average
Sprague River	Fair	Fair
Upper Klamath Lake	Average	Fair
Williamson River	Fair	Fair



STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Clear Lake Reservoir Inflow ^k	71	80	Feb.-July		88
Gerber Reservoir Inflow ^k	34	79	Feb.-July		43
Sprague near Chiloquin	271	67	Feb.-Sept.		403
	185	63	April-Sept.		296
Upper Klamath Lake net Inflow ^k	755	76	Feb.-Sept.	1202	994
	445	72	April-Sept.	599	619
Williamson below Sprague River	476	70	Feb.-Sept.		680
	332	70	April-Sept.		475

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Upper Klamath	1	96	95

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake	440.2	297.9	302.0	206.7
Gerber	94.0	54.5	62.6	39.2
Upper Klamath Lake	584.0	410.4	406.1	360.9

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Lost River	3	45	85
Sprague River	3	45	60
Upper Klamath	8	40	60
Williamson River	3	40	60

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

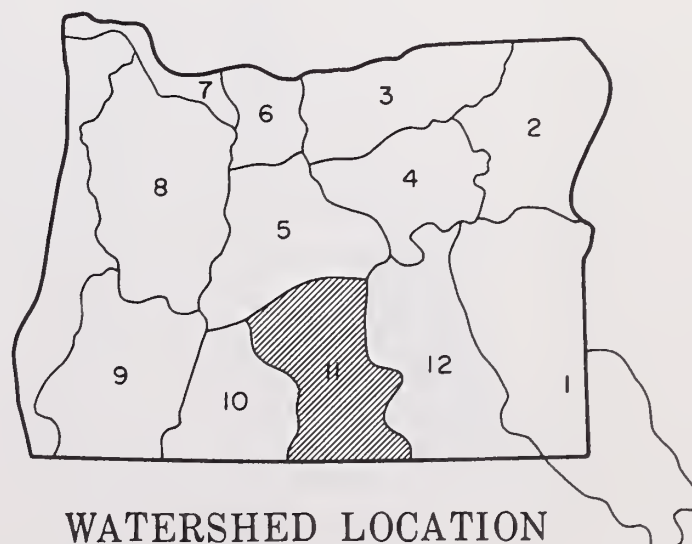
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK THIS MONTH FOR LAKE COUNTY IS VARIABLE. NEAR AVERAGE SUPPLIES ARE FORECAST FOR STREAMS HEADING IN THE WARNER MOUNTAINS, WHILE BELOW AVERAGE SUPPLIES ARE SEEN FOR THE WESTERN AND NORTHERN PARTS OF THE COUNTY. IRRIGATORS WITH STORED WATER AVAILABLE SHOULD HAVE ADEQUATE SUPPLIES. THE SNOW COVER RANGES FROM 120% ON TWENTYMILE CREEK DOWN TO 50% ON SILVER CREEK. PRECIPITATION SO FAR THIS WINTER HAS BEEN ABOUT 70% OF NORMAL. MOUNTAIN SOILS ARE WELL WETTED AND THIS FACTOR SHOULD HELP CONTRIBUTE TO THE SNOWMELT RUNOFF. FORECASTED SPRING AND SUMMER STREAM-FLOW VARIES FROM A HIGH OF 100% OF AVERAGE ON TWENTYMILE CREEK DOWN TO 50% ON SILVER CREEK.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Fair	Fair
Crooked Creek	Fair	Fair
Deep Creek	Average	Average
Dry Creek	Fair	Fair
East Side Goose Lake	Fair	Fair
Guano Lake	Average	Fair
Honey Creek	Average	Fair
Lakeview Water Users Assn.	Average	Average
Rock Creek (Hart Mountain)	Fair	Fair
Silver-Buck Creeks	Fair	Fair
Summer Lake	Average	Fair
Thomas Creek	Fair	Fair
Twentymile Creek	Average	Fair
Warner Lakes	Average	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Chewaucan near Paisley	67	75	March-July	117	89
Deep above Adel	68	93	March-July		73
Drews Reservoir net Inflow ^d	29	63	March-July		46
Honey Creek near Plush	16.0	89	March-July		18.0
Silver Creek near Silver Lake	10.0	49	March-July		21
Twentymile near Adel	24	100	March-July		24

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Chewaucan, Silver Creek, Drew Creek	1	96	95
Honey, Deep, 20-Mi. Cr.	1	104	107

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Cottonwood	8.7	1.7	1.6	2.1*
Drews	63.0	39.0	44.2	34.0
Thompson Valley	19.5		- -	- -
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Chewaucan River	3	45	60
Deep Creek	3	45	85
Drew Creek	3	45	80
Honey Creek	3	40	75
Silver Creek	3	30	45
Twentymile Creek	2	75	120

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK
HARNEY BASIN
WATERSHEDS
OREGON

as of

February 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

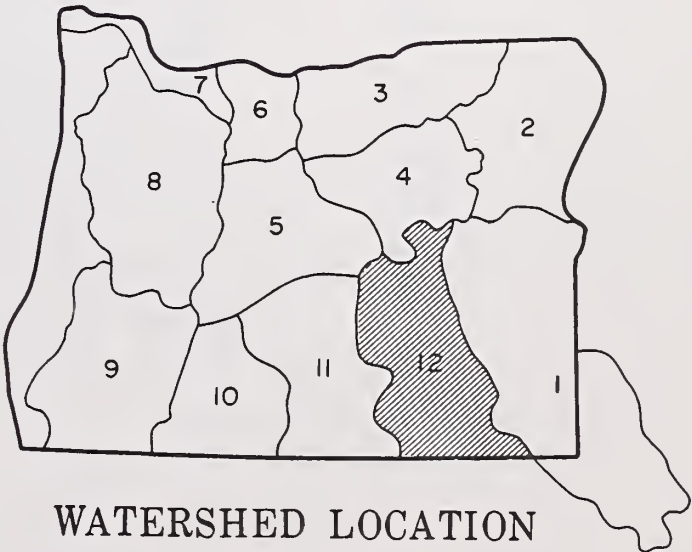
GENERAL OUTLOOK

AVERAGE TO SLIGHTLY BELOW AVERAGE IS THE WATER SUPPLY OUTLOOK FOR HARNEY COUNTY. THE SNOW COVER GENERALLY RANGES FROM 60 PERCENT OF AVERAGE ON SILVER CREEK UP TO AVERAGE IN THE STEENS MOUNTAINS. PRECIPITATION FOR THE NOVEMBER-JANUARY WINTER WAS NEAR NORMAL BUT WAS ONLY 62% OF AVERAGE DURING JANUARY. MOUNTAIN SOIL MOISTURE IS SLIGHTLY BELOW AVERAGE AND WILL DETRACT SOME FROM THE SNOWMELT RUNOFF. SPRING AND SUMMER STREAMFLOW WILL BE BELOW AVERAGE IN THE NORTHERN PART OF THE COUNTY AND AVERAGE TO ABOVE IN THE SOUTHERN PART.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Average	Fair
Cow Creek	Fair	Fair
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Fair	Fair
Rattlesnake Creek	Fair	Fair
Silver Creek	Fair	Fair
Silvies River	Fair	Fair
Soldier-Prather Creek	Fair	Fair
Trout Creek	Excellent	Average
Whitehorse Creek	Excellent	Average



STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Donner und Blitzen near Frenchglen	52	92	March-July		57
	51	92	April-Sept.		55
Silver near Riley	13	72	April-July		17.9
Silvies River near Burns	87	86	March-July		101
	73	88	April-Sept.		83
Trout Creek near Denio	9.7	127	March-July		7.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Silvies River, Silver Cr. Trout Cr., Donner und Blitzen River	3 c	91	89

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Donner und Blitzen R.	4	105	99
Silver Creek	3	35	60
Silvies River	4	50	85
Trout Creek	3	135	195

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

FEBRUARY 1, 1973

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont (In.)	Water Content (inches)	
				Last Yr.	Ave. i
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	1/30	18	3.7	13.4	3.4 ^h
Battle Creek ^e (Ida.)	1/27	12	2.7	5.9	2.8 ^m
Bear Creek ^e (Nev.)	1/27	48	15.2	20.4	11.3 ^h
Big Bend (Nev.)	1/29	25	6.6	12.7	5.3
Blue Mountain Springs	1/30	34	10.3	18.1	10.4
Blue Mtn. Springs Pillow*	1/30	-	8.2	13.7	- -
Buck Pasture ^e	1/27	3	0.6	2.0	1.6 ^m
Buckskin, Lower (Nev.)	c				
Buckskin, Upper (Nev.)	c				
Bull Basin ^e (Ida.)	1/27	8	1.8	1.2	0.9 ^m
Bully Creek ^e	1/27	12	2.7	2.0	2.3 ^m
Call Meadow ^e	1/27	12	2.7	2.4	2.1 ^m
Columbia Basin ^e (Nev.)	2/1	38	10.3	11.8	- -
Cottonwood-Indian ^e	1/27	12	2.7	1.6	1.0 ^m
Crane Prairie	c				
Disaster Peak (Nev.)	c				
Eldorado Pass	1/30	11	2.4	4.2	2.5 ^h
Fawn Creek ^e (Nev.)	2/1	28	7.3	7.2	- -
Fish Creek ^e	1/27	60	16.8	25.5	14.4 ^h
Fish Creek Pillow*	c			- -	- -
Flag Prairie ^e	1/27	12	2.7	5.9	2.5 ^m
Fox Creek (Nev.)	c				
Fry Canyon (Nev.)	1/29	23	5.8	9.8	4.7
Gold Creek (Nev.)	1/29	14	3.8	8.3	3.6
Granite Peak (Nev.)	1/29	41	12.1	11.6	8.3 ^h
Hyde Pasture ^e (Ida.)	1/27	12	2.7	9.2	3.8 ^h
Jack Creek, Lower (Nev.)	c				
Jack Creek, Upper ^e (Nev.)	2/1	24	6.2	8.4	5.1 ^h
Jack Peak (Nev.)	c				
Lake Creek R.S.	1/30	24	4.9	12.0	7.0 ^h
Laurel Draw (Nev.)	b			12.7	4.8 ^h
Logan Valley ^e	1/27	21	5.4	10.5	5.1 ^m
Lookout Butte ^e	1/27	1	0.1	0.4	0.1 ^m
Louse Canyon ^e	b			2.4	2.0 ^m
Martin Creek (Nev.)	1/29	29	7.3	9.0	5.7 ^h
Merritt Mountain ^e (Nev.)	2/1	18	4.5	11.7	- -
Midas ^e (Nev.)	2/1	9	1.9	7.0	- -
Mud Flat (Ida.)	1/30	19	4.0	8.2	3.4 ^h
Oregon Canyon ^e	1/27	27	7.0	5.9	3.2 ^m
Quinn Ridge ^e (Nev.)	1/27	12	2.7	2.0	1.5 ^m
Red Canyon ^e (Ida.)	1/27	21	5.5	8.4	4.2 ^m
Rock Spring	1/29	13	4.0	6.5	3.8
Rodeo Flat (Nev.)	1/29	19	4.9	8.8	4.2
76 Creek ^e (Nev.)	2/1	32	8.3	17.7	6.1 ^h
Silver City (Ida.)	1/31	27	6.7	20.7	9.2 ^h
Silvies ^e	1/27	12	2.7	10.8	6.4 ^h
Silvies Pillow*	c			- -	- -
South Mountain #2 (Ida.)	1/26	24	6.4	17.0	7.3
Stag Mountain ^e (Nev.)	2/1	24	6.2	6.3	- -
Stinking Water	1/27	8	1.9	4.2	2.6
Succor Creek ^e (Ida.)	1/27	12	2.7	7.8	4.4 ^m
Taylor Canyon (Nev.)	1/31	21	5.5	5.4	3.6 ^h
Toe Jam ^e (Nev.)	2/1	33	8.9	8.1	- -
Tremewan Ranch (Nev.)	1/31	7	1.4	1.1	1.2
Triangle (Ida.)	1/27	4	0.8	2.4	0.8
Trout Creek ^e	1/27	27	7.0	4.8	3.7
"V" Lake ^e	1/27	15	3.4	9.9	2.5
Vaught Ranch ^e (Ida.)	1/27	21	5.5	5.9	- -
War Eagle ^e (Ida.)	1/27	60	16.8	20.7	- -
*Manometer Reading.					

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i
BURNT, POWDER, PINE, GRANDE RONDE IMNAHA WATERSHEDS					
Aneroid Lake #1	1/24	65	18.6	31.0	24.0
Aneroid Lake #2	1/24	47	12.4	27.8	21.6
Anthony Lake	1/30	45	13.6	28.6	16.4
Bald Mountain ^e (Ore.)	2/1	45	12.6	27.2	16.7 ^m
Beaver Reservoir	1/29	19	3.9	15.2	6.7
Beaver Reservoir (Alt.)	1/29	22	4.5	18.0	- -
Big Sheep ^e	2/1	57	16.0	28.6	18.0 ^m
Blue Mtn. Summit	1/30	20	4.2	11.2	5.6
Bourne	1/29	32	8.0	17.2	10.3
County Line	1/31	9	1.6	8.6	4.1
Dooley Mountain	1/24	18	5.1	11.3	5.4
Eilertson Meadows	1/26	19	4.5	13.9	7.6
Eldorado Pass	1/30	11	2.4	4.2	2.5 ^h
Gold Center	1/29	28	6.8	14.2	8.2
Goodrich Lake	1/30	62	19.9	49.9	23.7 ^h
Intake House	1/26	24	6.0	13.2	- -
Little Alps	1/30	25	5.5	18.7	7.9
Little Antone	1/30	16	3.8	10.3	- -
Lucky Strike	1/30	19	5.0	18.6	8.0 ^h
Lucky Strike Pillow*	1/30	-	4.2	21.2	- -
Meacham	1/29	10	2.4	16.1	6.6
Mirror Lake ^e	2/1	134	38.9	- -	44.7 ^m
Moss Spring	1/30	38	10.8	26.2	14.7
Power Plant	1/26	12	2.0	8.3	- -
Schneider Meadows	1/29	68	22.5	27.3	19.4
Schoolmarm	1/31	6	0.8	7.2	3.6
Standley ^e	2/1	59	16.5	27.5	17.2 ^m
Taylor Green	1/30	35	9.4	21.0	11.6 ^h
Tipton	1/30	26	5.8	13.2	6.9
Tipton Snow Pillow*	1/30	-	7.5	- -	- -
Tollgate	1/30	27	7.5	32.3	15.9
TV Ridge ^e	2/1	34	9.5	17.3	- -
*Manometer reading.					
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	1/31	16	3.4	17.1	7.2
Arbuckle Mtn. Pillow*	1/31	-	9.9	27.8	- -
Battle Mountain Summit	1/29	T	T	6.4	1.8 ^m
Blue Mountain Camp	1/30	14	4.8	23.6	10.6 ^h
Butte Creek Summit	b			- -	- -
Emigrant Springs	1/29	2	0.2	11.4	4.0
High Ridge Pillow*	b			36.0	- -
Lucky Strike	1/30	19	5.0	18.6	8.0 ^h
Lucky Strike Pillow*	1/30	-	4.2	21.2	- -
Meacham	1/29	10	2.4	16.1	6.6
Tollgate	1/30	27	7.5	32.3	15.9
Weston Mountain	1/30	T	T	0.4	1.0 ^m
*Manometer Reading.					

BASIC DATA SUPPLEMENT 1

FEBRUARY 1, 1973

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave i

UPPER JOHN DAY WATERSHEDS					
Anthony Lake	1/30	45	13.6	28.6	16.4
Arbuckle Mountain	1/31	16	3.4	17.1	7.2
Arbuckle Mtn. Pillow*	1/31	-	9.9	27.8	-
Battle Mountain Summit	1/29	T	T	6.4	1.8 ^m
Beech Creek Summit	1/31	11	2.5	8.0	3.7 ^h
Blue Mountain Springs	1/30	34	10.3	18.1	10.4
Blue Mtn. Springs Pillow*	1/30	-	8.2	13.7	-
Blue Mountain Summit	1/30	20	4.2	11.2	5.6
Butte Creek Summit	b			-	-
Derr	1/31	24	6.0	10.7	6.6
Gold Center	1/29	28	6.8	14.2	8.2
Indian Creek Butte ^e	1/27	66	18.5	25.0	-
Izee Summit	1/29	15	3.8	8.8	5.7 ^h
Lucky Strike	1/30	19	5.0	18.6	8.0 ^h
Lucky Strike Pillow*	1/30	-	4.2	21.2	-
Marks Creek	1/29	3	0.3	6.9	3.1
Ochoco Meadows	1/30	15	3.6	12.6	6.6
Olive Lake ^e	2/1	30	7.2	20.4	12.2
Schoolmarm	1/31	6	0.8	7.2	3.6
Snow Mountain	1/31	32	7.4	16.2	8.6 ^h
Snow Mtn. Pillow**	2/2	-	11.7	15.2	-
Starr Ridge	1/31	12	2.4	8.2	4.1 ^h
Tipton	1/30	26	5.8	13.2	6.9
Tipton Snow Pillow*	1/30	-	7.5	-	-
Williams Ranch	b			4.3	0.9 ^m

*Manometer reading

**Telemetry reading

UPPER DESCHUTES WATERSHEDS					
Bald Peter	1/31	43	10.9	-	-
Caldwell Ranch	1/31	21	5.2	9.9	8.4 ^h
Cascade Summit	1/31	45	11.7	33.9	19.1
Chemult	1/31	23	5.8	11.0	8.4
Chemult Alternate	1/31	27	6.6	-	-
Derr	1/31	24	6.0	10.7	6.6
Hogg Pass	1/31	42	10.6	51.1	25.6
Hungry Flat	1/29	7	1.3	8.5	5.1
Irish-Taylor Pillow**	2/2	-	19.4	45.5	24.0
Marks Creek	1/29	3	0.3	6.9	3.1
New Crescent Lake	1/29	21	5.6	14.2	10.5
New Dutchman Flat #2	1/29	61	24.4	63.3	31.8
Ochoco Meadows	1/30	15	3.6	12.6	6.6
Racing Creek	1/31	20	1.9	-	-
Snow Mountain	1/31	32	7.4	16.2	8.6 ^h
Snow Mtn. Pillow**	2/2	-	11.7	15.2	-
Tamarack	1/30	8	2.1	6.6	4.3 ^h
Tangent	1/29	35	10.8	26.9	15.4
Three Creek Butte	1/26	14	3.5	14.3	8.0 ^h
Three Creek Meadow	1/26	22	6.3	21.7	12.3
Three Creek Mdw. Pillow**	2/2	-	9.2	24.0	-
Waldo Lake	1/31	41	11.4	37.4	19.7
Willamette Pass	1/30	56	16.6	43.8	26.2
Willamette Pass Pillow**	b			-	-

**Telemetry reading

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave i

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	c				
Clear Lake	1/26	6	1.4	15.6	5.9
Clear Lake (Experimental)	1/26	16	4.0	21.2	9.8 ^h
Cooper Spur #2	1/30	18	4.2	13.5	8.5 ^m
Greenpoint	1/25	15	3.5	20.0	9.7
Knebal Springs	c				
Parkdale	1/31	2	0.2	0.2	0.8 ^m
Phlox Point	1/26	57	19.7	82.4	35.8
Red Hill	1/30	36	9.9	59.0	23.1
Still Creek	1/26	22	6.0	32.3	13.8
Still Cr. Alt. #2	1/26	23	5.9	30.9	-
Switchback	2/1	21	5.4	16.2	9.9 ^m
Tilly Jane	1/28	39	13.3	48.1	24.0
Ulrich Ranch Junction	c				
Umbrella Falls	c			98.8	-
Upper Valley	1/30	6	1.1	2.5	2.7 ^h

WILLAMETTE WATERSHEDS					
Cascade Summit	1/31	45	11.7	33.9	19.1
Champion	1/30	36	8.3	40.9	16.4
Clackamas Lake	c				
Clear Lake	1/26	6	1.4	15.6	5.9
Clear Lake (Expt.)	1/26	16	4.0	21.2	9.8 ^h
Dead Horse Grade	2/1	19	5.4	26.7	10.7
Detroit (Town)	1/31	0	0.0	0.5	1.4
Detroit Dam	1/31	0	0.0	0.5	0.3
Golden Curry Creek	1/30	5	0.9	9.8	3.7
Hogg Pass	1/31	42	10.6	51.1	25.6 ^m
Lake Harriet	2/1	0	0.0	3.6	2.1 ^m
Laurel Mountain	1/31	10	2.5	24.8	-
Layng Creek	1/30	0	0.0	0.0	T
Lookout Point Dam	1/31	0	0.0	0.2	0.0
Lost Creek Ranch	2/1	3	1.0	9.3	2.8
Lund Park	1/30	T	T	0.4	0.4 ^h
Marion Forks	1/31	13	3.0	15.5	8.2 ^h
Marys Peak	1/31	19	4.6	26.7	4.0 ^m
Marys Peak (Alt.)	1/31	18	4.7	26.1	-
McCredie Springs	1/31	T	T	2.1	0.2
McKenzie	2/1	50	16.2	58.5	27.6
McKenzie Bridge	2/1	0	0.0	0.0	0.3
Mill City	1/31	0	0.0	0.0	T
Oakridge	1/31	0	0.0	T	T
Peavine Ridge Pillow**	2/2	-	3.4	30.1	-
Phlox Point	1/26	57	19.7	82.4	35.8
Railroad Overpass	1/31	2	0.2	5.2	2.1
Saddle Mountain Pillow**	b			28.6	-
Salt Creek Falls	1/31	18	3.7	20.7	10.0
Santiam Junction	1/31	31	6.6	33.6	15.0
Seine Creek Pillow**	b			8.4	-
Still Creek	1/26	22	6.0	32.3	13.8
Still Creek Alt. #2	1/26	23	5.9	30.9	-
Timothy Lake	2/1	16	3.5	20.5	6.5 ^m
Valsetz Summit	1/31	2	0.2	8.0	-
Vida	2/1	0	0.0	0.0	T
Waldo Lake	1/31	41	11.4	37.4	19.7
Weaver Creek	1/30	1	0.1	1.8	1.0
White Branch Slide	2/1	8	1.8	11.6	4.0
Whitewater Bridge	1/31	5	1.4	9.3	3.7
Willamette Pass	1/30	56	16.6	43.8	26.2
Willamette Pass Pillow**	b			-	-

**Telemetry reading

BASIC DATA SUPPLEMENT 1

FEBRUARY 1, 1973

SNOW

SNOW

SNOW						SNOW					
DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.		DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)			Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i					Last Yr.	Ave. i
ROGUE, UMPQUA WATERSHEDS						KLAMATH WATERSHEDS					
Althouse	1/30	25	6.3	6.0	5.0	Annie Spring	1/31	83	26.7	38.3	27.8
Althouse #2	1/30	26	6.2	8.4	-	Billie Creek Divide	1/29	39	12.2	31.3	14.2 ^h
Annie Spring	1/31	83	26.7	38.3	27.8	Chemult	1/31	23	5.8	11.0	8.4
Beaver Dam Creek	1/30	26	8.3	15.7	8.1 ^m	Chemult (Alternate)	1/31	27	6.6	-	-
Big Red Mountain	1/27	52	13.2	25.6	19.8 ^h	Chiloquin (PP&L)	b			-	1.7 ^h
Billie Creek Divide	1/29	39	12.2	31.3	14.2 ^h	Cold Springs Camp	1/26	61	18.7	39.7	21.9 ^h
Caliban	1/29	55	17.8	33.5	-	Cold Springs Camp Pillow**	2/2	-	15.5	29.1	-
Champion	1/30	36	8.3	40.9	16.4	Crazyman Flat ^e	1/26	18	4.7	12.0	6.5 ^m
Cold Springs Camp	1/26	61	18.7	39.7	21.9 ^h	Crowder Flat ^e (Calif.)	1/26	4	0.9	3.3	3.0 ^m
Cold Springs Camp Pillow**	2/2	-	15.5	29.1	-	Crystal (PP&L)	1/30	14	5.5	6.5	7.1 ^h
Deadwood Junction	1/30	19	5.7	10.4	6.3 ^h	Diamond-Crater Summit	1/29	55	15.4	39.2	22.7 ^h
Diamond-Crater Summit	1/29	55	15.4	39.2	22.7 ^h	Diamond-Crater Sum. Alt.	1/29	50	13.4	34.8	-
Diamond-Crater Sum. Alt.	1/29	50	13.4	34.8	-	Diamond Lake Jct. (97)	1/29	12	2.0	5.8	4.7 ^h
Diamond Lake	1/29	30	8.0	21.6	14.6	Dog Hollow ^e	1/26	4	0.9	1.2	1.2 ^m
Fish Lake	1/29	26	7.4	16.8	9.8 ^m	Finley Corrals ^e	1/26	40	11.2	20.5	10.4 ^m
Fourmile Lake	c			-	17.0 ^h	Fort Klamath (PP&L)	1/30	4	1.2	2.4	3.8 ^h
Grayback Peak	1/24	34	8.3	23.7	18.6 ^h	Fourmile Lake	c			-	17.0 ^h
Howard Prairie Reservoir	1/30	18	5.2	9.4	6.4 ^h	Gerber	2/1	4	1.0	3.2	2.3 ^h
Hyatt Prairie	1/30	18	5.0	10.4	5.9 ^h	Harriman (PP&L)	1/30	12	3.8	-	3.6 ^h
King Mountain #1	1/30	20	4.1	8.5	-	Hyatt Prairie Reservoir	1/30	18	5.0	10.4	5.9 ^h
King Mountain #2	1/30	17	3.8	4.5	-	Kirk (PP&L)	b			-	5.8 ^m
King Mountain #3	1/30	6	1.4	0.5	-	Lake of the Woods	1/29	14	4.1	13.3	8.4 ^h
King Mountain #4	1/30	0	0.0	0.5	-	Park Headquarters	1/31	100	32.3	58.1	36.5
King Mountain #5	1/30	0	0.0	0.3	-	Quartz Mountain	1/30	10	2.5	8.0	5.4
King Mountain #6	1/30	0	0.0	T	-	Quartz Mountain (Ext.)	1/30	12	3.2	7.5	-
Little Red Mountain	1/27	37	10.3	27.4	15.2 ^h	Seven Lakes #2	1/24	63	20.4	45.2	25.8 ^h
Mt. Ashland Switchback	1/29	64	16.7	31.2	-	Seven Mile	1/24	54	16.0	28.4	-
Mule Creek	1/30	13	3.9	14.3	-	State Line ^e (Calif.)	1/26	24	6.2	10.5	6.5 ^m
North Umpqua	1/31	20	4.5	18.2	10.4	Strawberry	1/27	20	4.9	11.6	5.4 ^h
Page Mountain	1/30	16	4.0	2.7	3.9 ^h	Strawberry ^e	1/26	14	3.6	10.5	-
Park Headquarters	1/31	100	32.3	58.1	36.5	Summer Rim ^e	1/26	27	7.6	14.8	9.8 ^m
Red Butte #1	1/29	20	5.2	21.0	9.9 ^h	Summer Rim Pillow*	c			-	-
Red Butte #2	1/29	12	2.6	9.8	6.7 ^h	Sycan Flat ^e	1/26	12	3.1	11.3	5.7 ^m
Red Butte #3	1/29	6	1.4	6.2	4.1 ^h	Taylor Butte	1/30	7	2.2	5.2	4.5 ^h
Red Butte #4	1/29	0	0.0	1.8	2.9 ^h						
Red Butte #5	1/29	0	0.0	0.5	0.6 ^m	*Manometer reading					
Red Butte #6	1/29	0	0.0	T	0.0 ^m	**Telemetry reading					
Seven Lakes #2	1/24	63	20.4	45.2	25.8 ^h						
Seven Mile	1/24	54	16.0	28.4	-						
Silver Burn	1/29	21	5.6	16.0	9.8						
Siskiyou Summit	1/30	10	1.4	6.3	6.6						
Siskiyou Summit Alt. #2	1/30	7	0.9	6.0	-						
Ski Bowl Road	1/29	50	14.2	25.9	-						
South Fork Canal	1/29	4	1.1	4.5	2.8						
Trap Creek	1/31	18	4.8	16.0	8.6 ^h						
Whaleback	1/31	56	15.9	33.5	21.7 ^h						
**Telemetry reading											

FEBRUARY 1, 1973

FEBRUARY 1, 1973

SNOW		THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)		
				Last Yr.	Ave. 2	
HARNEY BASIN WATERSHEDS						
Blue Mountain Springs	1/30	34	10.3	18.1	10.4	
Blue Mtn. Springs Pillow*	1/30	-	8.2	13.7	- -	
Buck Pasture ^e	1/27	3	0.6	2.0	1.6 ^m	
Buckskin Lake ^e	1/27	0	0.0	1.6	0.8 ^m	
Call Meadow ^e	1/27	12	2.7	2.4	2.1 ^m	
Delintment Lake	1/31	16	2.5	8.7	5.1 ^h	
Denio Creek ^e	1/27	3	0.6	0.6	0.6 ^m	
Disaster Peak (Név.)	^c					
Emigrant Butte	1/30	3	1.0	5.4	2.8 ^h	
Fish Creek	^c					
Fish Creek ^e	1/27	60	16.8	25.5	14.4 ^h	
Fish Creek Pillow*	^c					
Hart Mountain ^e	1/26	5	1.1	1.2	1.0 ^m	
Idlewild Camp	1/30	7	1.4	9.1	3.8	
Idlewild Camp (Alt.)	1/30	4	1.1	11.9	- -	
Izee Summit	1/29	15	3.8	8.8	5.7 ^h	
Lake Creek R. S.	1/30	24	4.9	12.0	7.0 ^h	
Oregon Canyon ^e	1/27	27	7.0	5.9	3.2 ^m	
Rock Spring	1/29	13	4.0	6.5	3.8	
Silvies	^c					
Silvies ^e	1/27	12	2.7	10.8	6.4 ^h	
Silvies Pillow*	^c					
Snow Mountain	1/31	32	7.4	16.2	8.6 ^h	
Snow Mountain Pillow**	2/2	-	11.7	15.2	- -	
Starr Ridge	1/31	12	2.4	8.2	4.1 ^h	
Stinking Water	1/29	8	1.9	4.2	2.6 ^h	
Trout Creek ^e	1/27	27	7.0	4.8	3.7 ^m	
"V" Lake ^e	1/27	15	3.4	9.9	2.5 ^m	
*Manometer reading						
**Telemetry reading						

*Manometer reading

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**Telemetry reading

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(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average of 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

FEBRUARY 1, 1973

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average i
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	c			
Big Bend (Nev.)	6700	48	16.7	1/29	12.5	12.3	15.6
Blue Mountain Spring	5900	42	16.9	1/30	6.2	6.1	9.2
Crane Prairie	5375	48	18.2	c			
Folly Farm	4450	30	12.5	c			
Jack Creek, Lower (Nev.)	6800	48	8.6	c			
Jordan Valley	4390	48	19.3	1/26	15.4	16.2	- -
Mud Flat (Ida.)	5500	36	10.0	1/30	9.4		
Rodeo Flat (Nev.)	6800	42	11.0	1/29	7.0	6.4	10.7
Taylor Canyon (Nev.)	6200	48	15.1	b		10.0	13.4
Triangle (Ida.)	5150	48	16.6	c			
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	1/30	8.8	9.1	9.9
Dooley Mountain	5430	36	9.2	1/24	2.5	2.9	3.4
Emigrant Springs	3925	48	22.3	1/29	18.6	20.5	18.3
Ladd Summit	3730	48	18.9	1/30	9.9	10.5	9.9
Moss Springs	5850	36	25.8	1/30	14.7	- -	- -
Tollgate	5070	48	23.6	1/30	15.4	15.4	19.7
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	1/29	12.6	12.8	12.3
Emigrant Springs	3925	48	22.3	1/29	18.6	20.5	18.3
Tollgate	5070	48	23.6	1/30	15.4	15.4	19.7
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	1/29	12.6	12.8	12.3
Beech Creek	4800	48	21.3	1/31	13.8	9.5	12.5
Blue Mountain Spring	5900	42	16.9	1/30	6.2	6.1	9.2
Blue Mountain Summit	5100	36	16.8	1/30	8.8	9.1	9.9
Derr	5670	24	9.0	1/31	5.6	7.5	- -
Marks Creek	4540	36	14.1	1/29	9.2	11.1	10.1
Snow Mountain	6300	48	16.7	1/31	12.4	12.9	13.8
Starr Ridge	5150	36	10.6	1/31	8.7	10.3	9.1
Williams Ranch	4500	42	17.9	1/31	16.3	17.9	17.2
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	1/31	5.6	7.5	- -
Marks Creek	4540	36	14.1	1/29	9.2	11.1	10.1
Snow Mountain	6300	48	16.7	1/31	12.4	12.9	13.8
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS							
Cooper Spur	3490	72	26.4	2/1	14.2	14.2	- -
KLAMATH WATERSHEDS							
Quartz Mountain	5230	48	15.3	1/30	7.9	8.2	8.3

FEBRUARY 1, 1973

FEBRUARY 1, 1973

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average i
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	1/31	12.5	12.0	11.7
Quartz Mountain	5230	48	15.3	1/30	7.9	8.2	8.3
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	1/30	6.2	6.1	9.2
Fish Creek	7900	48	15.0	c			
Folly Farm	4450	30	12.5	c			
Silvies	6900	48	16.4	c			
Snow Mountain	6300	48	16.7	1/31	12.4	12.9	13.8
Starr Ridge	5150	36	10.6	1/31	8.7	10.3	9.1
Willow-Bald	5000	24	6.6	1/30	4.2	4.5	5.6

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBK records. (m) Average for 5 or more years in base period.

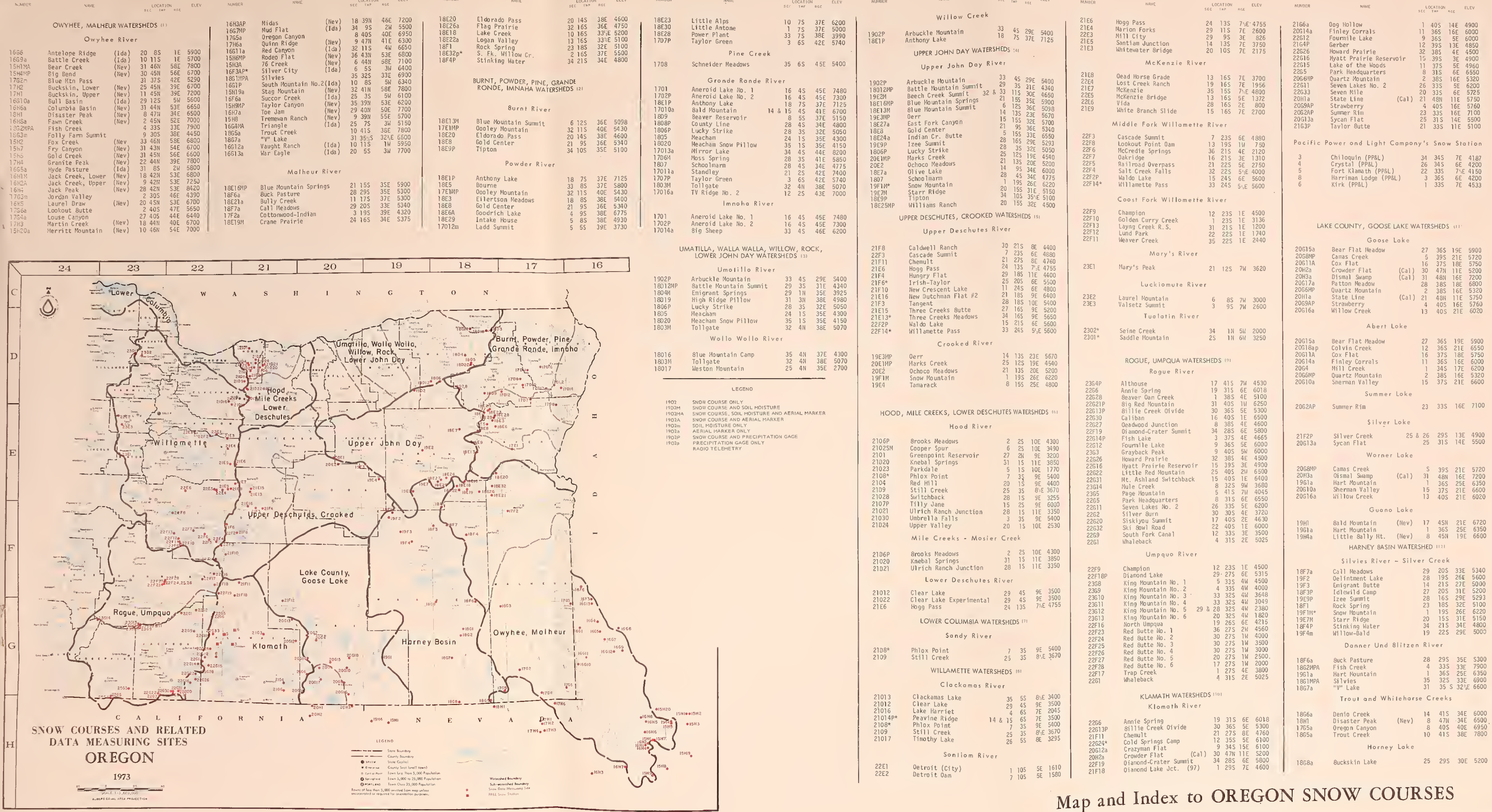
BASIC DATA SUPPLEMENT 3

FEBRUARY 1, 1973

PRECIPITATION (Inches)

PRECIPITATION (Inches)		CURRENT INFORMATION		PAST RECORD	
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip-itation	Last Year	Average ⁱ
Arbuckle Mountain (Morrow County)	5400	10/27 to 1/31/73	10.05	5.35	
Camas Creek (Lake County)	5825	12/29 to 1/31/73	3.30		
County Line (Umatilla County--Starkey)	4800	12/29 to 1/31/73	2.20		
Derr (Wheeler County)	5800	11/13 to 1/31/73	5.25		
Lucky Strike (Umatilla County)	5050	10/27 to 1/30/73	8.00		
Quartz Mountain (Lake County)	5300	12/29 to 1/30/73	0.80		
Silver Creek (Lake County)	4900	12/29 to 1/29/73	2.29		
Strawberry (Lake County)	5760	10/18 to 1/27/73	10.75		
Taylor Green (Union County)	5800	1/14 to 1/30/73	4.00		
<div>(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.</div>					





Map and Index to OREGON SNOW COURSES



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
- Department of National Defense
 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- The Crag Rats, Hood River, Oregon

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